DPD 8051/59

25 November 1959

MEMORANDUM TO: Chief, Air Section, DPD

SUBJECT : P2V-7 Capability

1. In reply to your memo dated 27 October 1959 same subject the following information is submitted:

a. The point of no return for P2V-7 with one reciprocating engine feathered is computed to be 1175 nm radius of action.

b. This figure represents the extreme range that a mission can be planned with a safety factor of single engine return when take-off weight is up to maximum gross.

2. The Requirements Section obtained long range cruise curves for emergency operation distance prediction from LAC. These curves cover maximum gross take-off of 82,000, 80,000 and 78,000 pounds, altitudes from sea level to 5,000 feet.

3. It is pointed out that the radius of action is predicted on the assumption that the aircraft will be flown on a straight line mission to point of no return and straight back to take-off base. Any turns in flight plan would naturally be to your advantage and would increase overall range. For [redacted] type missions, the overall range would normally exceed the mission requirement. In other words a planned track that did not increase your straight line out off distance to home plate would be all gravy. I believe most of your missions could be planned to fall within the limitations of the emergency operation distance prediction. However, any straight line mission above 1175 nm radius of action could be planned on a calculated risk basis where the risk, in percent of time, would be acceptable.

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4. In as much as only one set of curves are available, I plan to keep them in my safe under P2V-7 file. These curves are available any time you want to use them.

[redacted]

Chief, Requirements Section, DPD/OPS

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DPD/OPS/WFH/gma
Distribution:
1 - Ch, Air Sect
1 - ops file
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